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EXAMINER	
LEE, SIU M	

ART UNIT	PAPER NUMBER
2611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/628,822	WALKER ET AL.	
	Examiner	Art Unit	
	Siu M. Lee	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) *2* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 and 13, filed 2/21/2007 have been considered but are moot in view of the new ground(s) of rejection because of the amendment.

(1) Regarding claim 1:

Applicant's argument:

There is no motivation to combine the Lee (US 5,797,087) reference with the Godwin (US 6,741,834 B1) reference, Kawamata (US 2003/0054758 A1) reference and the Denda et al (US 2002/0099882 A1) reference to teach or suggest a receiver including a national broadcast demodulator coupled to the first antenna and the system controller, wherein the national broadcast demodulator provides a time-slot interrupt indicator to the system controller as recited in amended claim 1.

Examiner's answer:

The examiner rejected the original claim 1 by combining Godwin (US 6,741,834 B1) reference, Kawamata (US 2003/0054758 A1) reference and the Denda et al (US 2002/0099882 A1) reference. In the original claim 1, the first interrupt indicator is not limited to time-slot interrupt indicator. The Kawamata reference teaches an interrupt signal when the reception of the digital broadcast cannot be received normally. The teaching of Kawamata reference satisfies the limitation of the original claim 1. When rejecting the original claim 2, original claim 2 narrows down the limitation of the first

interrupt signal to a time-slot interrupt signal. The examiner relies on Lee reference teaching of the monitoring a preset broadcasting start time and a preset broadcasting end time of a preselected channel, which is similar to the time-slot interrupt as describe on page 8, paragraph 0023, lines 5-6; "the time-slot interruption provides a switched interruption of the national broadcast for X minutes" for the limitation of the time-slot interrupt signal to replace the teaching of Kawamata for the first interrupt signal. Since the amended claim 1 changed the first interrupt signal to a time-slot interrupt signal, the amended claim is moot in view of new ground of rejection.

(2) Regarding claim 13:

The amended claim 13 states that the monitoring step is monitoring specifically for a time-slot interrupt based on the receipt of time information in the national satellite broadcast. Since the amended claim 13 narrow down the limitation of the claim from "a time-slot interrupt or a signal interrupt" to "a time-slot interrupt", amended claim 13 is moot for new ground of rejection.

(3) Regarding claims 2, 5, and 13-20

The argument of claims 2, 5, and 13-20 depends on the argument of amended claim 1 and amended claim 13, therefore claims 2, 5, 13-20 are moot for new ground of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin (US 6,741,834 B1) in view of Denda et al. (US 2002/0099882 A1) and Lee (US 5,797,087).

(1) Regarding claim 1

Godwin discloses a receiver comprising:

a first antenna (antenna 112 in figure 5) for receiving a signal from a satellite (satellite 108 in figure 5) , wherein said satellite signal contains information of national interest (satellite 108 broadcasts signals to receivers disposed in an area hereinafter referred to as a national broadcast region) (column 5, lines 31-33) ;

a second antenna (antenna 112 in figure 5, as explained in column 6, lines 54-55, the tuner module 514 and the second tuner module 516 could be coupled to different antennae) receiving a signal from a land-based transmitter wherein said land-based signal contains information of local interest (terrestrial encoder/modulator/transmitter 510 and the antenna 512 in figure 5);

a national broadcast demodulator (satellite tuner/demod/decoder/demux 514 in figure 5) coupled to the first antenna (antenna 112) (column 6, lines 56-58) and the system controller (controller module 530 in figure 5) (column 7, lines 42-45);

a local broadcast demodulator (terrestrial tuner /demod/decoder/demux 516 in figure 5) coupled to the second antenna (antenna 112 in figure 5, as explained in column 6, lines 54-55, the tuner module 514 and the second tuner module 516 could be

coupled to different antennae) and the system controller (controller module 530 in figure 5) (column 7, lines 42-45).

Godwin fails to disclose: (a) the national broadcast demodulator provides a time-slot interrupt indicator to the system controller; and (b) a system controller wherein the local broadcast demodulator provides a second interrupt indicator to the system controller and an information output select device, wherein upon receiving either the time-slot or second interrupt indicator at the system controller, the system controller switches the information output select device between the national broadcast information and the local broadcast information.

With respect to (a), Lee teaches a receiver of monitoring a preset broadcasting start time of a preset channel and the preset broadcasting end time of a preset channel for switching the output of the radio broadcast. This preset listening operation mode provides a time-slot interrupt signal to switch the output of the radio broadcast from tuner 1 to tuner 2 for a predetermined period of time (column 4, line 60-column 5, lines 28).

It is desirable to use a control signal to automatically switch the output of the radio broadcast receiver to a preset channel for a preset period of time because it avoid distracting the attention of the driver when switching the channels (column 7, lines 7-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the system of Lee with the national broadcast demodulator of Godwin to provide a more convenient system.

With respect to (b), Denda et al. discloses a switchover device that comprises a system controller (system controller 20 in figure 1), the local broadcast demodulator (reception tuner 14 in figure 1) provides a second interrupt indicator (RDS information) (paragraph 0075, lines 9-13) to the system controller also an information output select device (changeover device 19 in figure 1), wherein upon receiving interrupt indicator at the system controller, the system controller switches the information output select device between the interrupt request device and another information source (paragraph 0023, lines 1-4).

It is desirable to use the switchover device as taught by Denda et al. because it makes it possible to dispense with a troublesome operation for resetting a switchover connection state for the switchover connection device (paragraph 0090, lines 4-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the system of Denda et al. with the system of Godwin and Lee to provide a more convenient system.

(2) Regarding claim 3:

Denda et al. further discloses the second interrupt indicator is an interrupt signal (paragraph 0023, lines 1-4).

(3) Regarding claim 4:

Denda et al. further discloses the interrupt signal is a radio data service (RDS) data signal (paragraph 0075, lines 9-14).

(4) Regarding claim 6:

Denda et al. further discloses the information output select device is diverge for audio data multiplexer (the switch element Swa1-Swa4 of the changeover device 19 in fig 6B select the output for the audio reproducing / outputting section) (switch element SWa1-Swa4 in figure 6B, paragraph 0075, lines 10-14).

(5) Regarding claim 7:

Godwin discloses a device wherein the national interest information satellite signal is an SDAR service signal (satellite tuner/demod/decoder/demux 514 in figure 5) and the local interest information land-based signal (terrestrial tuner /demod/decoder/demux 516 in figure 5) is an AM/FM signal (column 2, lines 5-13).

(6) Regarding claim 8:

Godwin discloses a device wherein the national broadcast demodulator (satellite tuner/demod/decoder/demux 514 in figure 5) is an SDAR service tuner and the local broadcast demodulator (terrestrial tuner /demod/decoder/demux 516 in figure 5) is an AM/FM tuner (column 2, lines 21-32).

(7) Regarding claim 9:

Denda et al. further discloses wherein digital audio signals are communicated from the tuners (different input 11-14 in figure 6B) to an audio multiplexer (the switch element Swa1-Swa4 in fig 6B select the output for the audio reproducing / outputting section and act as a audio multiplexer) (switch element SWa1-Swa4 in figure 6B, paragraph 0075, lines 10-14)

(8) Regarding claim 10:

Godwin discloses a device wherein the system controller further comprises a microcontroller (location module 518 and RBDS ROM database 528 in figure 5) (column 7, lines 18-21, 27-29 and 38-40).

(9) Regarding claim 11:

Godwin discloses a device wherein the microcontroller stores downloaded information relating to region-specific preferred local stations (column 7, lines 27-29).

(10) Regarding claim 12:

Godwin discloses a device wherein the downloaded information includes regional location information contains with a listing of the region-specific preferred local stations stored in a central database lookup table provided by a national broadcast service provider (the RBDS database can be periodically update via the satellite 108 in figure 5) (column 7, lines 23-29).

(11) Regarding claim 13:

Godwin discloses a method comprising the steps of:

determining if the receiver is set to a national information mode setting or a local information mode setting (step 710 in figure 7B) (column 9, lines 19-28);

upon determining when the national mode setting is detected, gathering location information of the receiver (step 806 in figure 8B) (column 8, line 67 – column 9, line 5);

downloading an available plurality of preferred local stations that correlate to the gathered location information (column 9, lines 5-9);

Godwin fails to disclose (a) choosing the a local station from the plurality of preferred local stations; (b) playing a national broadcast signal; (c) monitoring for a time-

slot interrupt; (d) detecting a time-slot interrupt and interrupting the national broadcast signal; and (e) initiating the playing of a local broadcast signal.

However, Lee discloses (a) a preset listening operation that choose at least one preset channel (column 4, lines 40-44); (b) while playing a first tuner 2 in figure 1 (step S2 in figure 2A, column 4, lines 13-14); (c) monitor for a time-slot interrupt (step S5 and S6 in figure 2A monitor for the preset start time, when the preset start time starts, the broadcasting of the first tuner 2 will be interrupt for a predetermined period of time, column 4, lines 48-53); (d) detecting a time-slot interrupt and interrupting the national broadcast signal (when the preset start time is the same as the present time, the microcomputer 9 outputs a control signal to the second tuner 3 at step S8 of figure 2A to tune the second tuner 3 on and then turn the first tuner 2 off, column 5, lines 1-2); (e) initiating the playing of a local broadcast signal (the preset broadcasting signal tuned by the second tuner 3 is applied to the RF amplifier, column 5, lines 4-7).

It is desirable to choose the a local station from the plurality of preferred local stations; play a national broadcast signal; monitor for a time-slot interrupt; detect a time-slot interrupt and interrupting the national broadcast signal; and initiate the playing of a local broadcast signal because it avoids the user to operate a audio system to select a desired broadcasting program which is regularly broadcast (column 7, lines 8-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combiner the method of Lee with the method of Godwin to provide a more convenient system.

(12) Regarding claim 15:

Godwin discloses a method wherein after the choosing step, searching for the local station chosen from the plurality of preferred local station (determine if the selected regional media program is intended to be received in the local broadcast region, step 718 in figure 7B) (column 9, lines 4-7).

(13) Regarding claim 17:

Godwin discloses that the downloading step is performed at specific predetermined times (the RDBS database can be periodically updated via the satellite 108) (column 7, lines 29-30).

(14) Regarding claim 19:

Godwin discloses that the gathering location information of the receiver is conducted via a GPS signal (column 7, lines 30-35).

(15) Regarding claim 23:

Godwin discloses a method comprising the steps of:

determining if the receiver is set to a national information mode setting or a local information mode setting (step 710 in figure 7B) (column 9, lines 19-28);

upon determining when the national mode setting is detected, gathering location information of the receiver (step 806 in figure 8B) (column 8, line 67 – column 9, line 5);

downloading an available plurality of preferred local stations that correlate to the gathered location information (column 9, lines 5-9);

Godwin fails to disclose (a) choosing the a local station from the plurality of preferred local stations; (b) playing a national broadcast signal; (c) monitoring for an interrupt signal that is at least one of an RDS data signal, a series of tones in an audio

channel, an analog signal, and a digital signal; (d) detecting said interrupt signal and interrupting the national broadcast signal; and (e) initiating the playing of a local broadcast signal.

However, Lee discloses (a) a preset broadcasting listening operation that choose at least one preset channel (column 4, lines 40-44); (b) while playing a first tuner 2 in figure 1 (step S2 in figure 2A, column 4, lines 13-14); (c) monitor for a interrupt signal that is at least one of an RDS data signal, a series of tones in an audio channel, an analog signal, and a digital signal (step S5 and S6 in figure 2A monitor for the preset broadcasting start time, when the preset broadcasting start time starts, the microcomputer 9 will output a control signal to turn on the second tuner 3 and then turn off the first tuner 2 for broadcasting of the preset channel for a predetermined period of time, since the control signal is from the microcomputer 9, it is well known in the art that the control signal will either be a digital control signal or an analog control signal, column 4, lines 48-53); (d) detecting said interrupt signal and interrupting the national broadcast signal (when the preset start time is the same as the present time, the microcomputer 9 outputs a control signal to the second tuner 3 at step S8 of figure 2A to tune the second tuner 3 on and then turn the first tuner 2 off, column 5, lines 1-2); (e) initiating the playing of a local broadcast signal (the preset broadcasting signal tuned by the second tuner 3 is applied to the RF amplifier, column 5, lines 4-7).

It is desirable to choose a local station from the plurality of preferred local stations; play a national broadcast signal; monitor for an interrupt signal that is at least one of an RDS data signal, a series of tones in an audio channel, an analog signal, and

a digital signal; detect said interrupt signal and interrupting the national broadcast signal; and initiate the playing of a local broadcast signal. because it avoids the user to operate a audio system to select a desired broadcasting program which is regularly broadcast (column 7, lines 8-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combiner the method of Lee with the method of Godwin to provide a more convenient system.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin (US 6,741,834 B1) in view of Denda et al. (US 2002/0099882 A1) and Lee (US 5,797,087) as applied to claim 3 above, and further in view of Williams et al. (US 5,701,161).

Godwin, Denda et al. and Lee discloses all the subject matter except the interrupt signal is a series of tones on the audio channel.

Williams et al. discloses an emergency broadcast system with interrupt signal of a series of tones on the audio channel (column 11, lines 3-9).

It is desirable to have an interrupt signal is a series of tones on the audio channel because it can attract the attention of the audience and alter them of the message (column 5, lines 30-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the interrupt signal that is a series of tones in the system of Godwin, Denda et al. and Lee to provide a more effective interrupt signal.

3. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin (US 6,741,834 B1) in view of Lee (US 5,797,087) as applied to claim 13 above, and further in view of Alcock et al. (US 2004/0198389 A1).

(1) Regarding to claim 14:

Godwin and Lee disclose all the subject matter except the method wherein prior to the downloading step, determined if the receiver is in need of a preferred local update in view of the gathered location information.

However, Alcock et al. discloses a method wherein prior to the downloading step (processing step 50 in figure 5), determined if the receiver is in need of a preferred local update in view of the gathered location information (discriminate step 44 in figure 5, discriminated 44 to determine if the incoming data is relevant (step 46) to the receiver's current location, if the data is not relevant, the data is discarded (step 48)) (paragraph 0034, lines3-10).

It is desirable to determined if the receiver is in need of a preferred local update in view of the gathered location information because it allow better network resource allocation and prevent processing useless data (paragraph 0005, lines 15-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the method of Alcock et al. in the method of Godwin and Lee to provide a more efficient method.

(2) Regarding claim 20:

Godwin and Lee disclose all the subject matter except the method wherein the gathering location information of the receiver is conducted via a manual user input of the receiver's geographic location.

However, Alcock et al. discloses a method wherein the gathering location information of the receiver is conducted via a manual user input of the receiver's geographic location (the desired destination can be input by user and the receiver will extract the appropriate geographic location specific information corresponding to the selected location from a broadcast signal) (paragraph 0042, lines 8-11).

It is desirable to gathering location information of the receiver is conducted via a manual user input of the receiver's geographic location because the information may be synchronized to the location of the user so that the user drives towards the destination city, the information is updated appropriately (paragraph 0042, lines 23-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the method as taught by Alcock et al. with the method of Godwin and Lee to provide a more user friendly method.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin (US 6,741,834 B1) in view of Lee (US 5,797,087) as applied to claim 13 above, and further in view of Lee et al. (US 6,829,475 B1).

Godwin and Lee disclose all of the subject matter except the downloading step is performed randomly by a national broadcaster service provider.

However, Lee et al. discloses a method comprising the downloading step is performed randomly (whenever the user request a recalibration of local audio stations) by a national broadcaster service provider (column 14, lines 56-61).

It is desirable to use the method as taught by Lee et al. because it will automatically update the database by the GPS signal when needed (column 14, lines 59-62). There, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teaching of Lee et al. with the method of Godwin and Lee to provide a more convenient method for the user.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin (US 6,741,834 B1) in view of Lee (US 5,797,087) as applied to claim 13 above, and further in view of Yuhara et al. (US 2004/0192189 A1).

Godwin and Lee disclose all of the subject matter except the downloading step is performed when the receiver is activated.

However, Yuhara et al. discloses a receiver that the downloading step is performed when the receiver is activated (paragraph 0053, lines 7-16).

It is desirable to perform the downloading step when the receiver is activated because it would provide most updated database in the receiver (paragraph 0005, lines 3-9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the method of Yuhara et al. in the method of Godwin and Lee to provide reliable correct information for the user.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin (US 6,741,834 B1) in view of Denda et al. (US 2002/0099882 A1) and Kawamata et al. (US 2003/0054758 A1).

Godwin discloses a receiver comprising:

a first antenna (antenna 112 in figure 5) for receiving a signal from a satellite (satellite 108 in figure 5) , wherein said satellite signal consists of information of national interest (the receiver comprises a tuner for receiving a first signal from a satellite, wherein the first signal comprises national media programs, column 2, lines 4-6, The uplink center 104 in figure 1 receive program material and program control information from the control center 102 and using an uplink antenna 106, transmit the program material and program control information to the satellite 108, the satellite 108 receives and processes this information, and transmit the media program and control information to subscribers, column 3, lines 31-38, satellite 108 broadcasts signals to receivers disposed in an area hereinafter referred to as a national broadcast region, column 5, lines 31-33) ;

a second antenna (antenna 112 in figure 5, as explained in column 6, lines 54-55, the tuner module 514 and the second tuner module 516 could be coupled to different antennae) receiving a signal from a land-based transmitter wherein said land-based signal contains information of local interest (terrestrial encoder/modulator/transmitter 510 and the antenna 512 in figure 5);

a national broadcast demodulator (satellite tuner/demod/decoder/demux 514 in figure 5) coupled to the first antenna (antenna 112) (column 6, lines 56-58) and the system controller (controller module 530 in figure 5) (column 7, lines 42-45);

a local broadcast demodulator (terrestrial tuner /demod/decoder/demux 516 in figure 5) coupled to the second antenna (antenna 112 in figure 5, as explained in column 6, lines 54-55, the tuner module 514 and the second tuner module 516 could be coupled to different antennae) and the system controller (controller module 530 in figure 5) (column 7, lines 42-45).

Godwin fails to disclose: (a) the national broadcast demodulator provides a first interrupt indicator to the system controller; and (b) a system controller wherein the local broadcast demodulator provides a second interrupt indicator to the system controller and an information output select device, wherein upon receiving either the first or second interrupt indicator at the system controller, the system controller switches the information output select device between the national broadcast information and the local broadcast information.

With respect to (a), Kawamata et al. discloses a national broadcast demodulator (digital broadcast receiver containing disconnect detection portion 106 in figure 2) that provides a first interrupt indicator (when the disconnect detection portion 106 in figure 2 decides that the digital broadcast signal DS cannot be received normally, output of decision step S51 in figure 13) to the system controller (reproduction /switch-over portion 109 in figure 2) (paragraph 94, lines 7-15).

It is desirable to provides a first interrupt indicator to the system controller as taught by Kawamata et al. because it can avoid interruption of output of a content when the digital broadcast signal cannot be received normally (paragraph 240, lines 2-4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to employ the teaching of Kawamata et al. in the system of Godwin to improve the quality of service of the broadcasting system.

With respect to (b), Denda et al. discloses a switchover device that comprises a system controller (system controller 20 in figure 1), the local broadcast demodulator (reception tuner 14 in figure 1) provides a second interrupt indicator (RDS information) (paragraph 0075, lines 9-13) to the system controller also an information output select device (changeover device 19 in figure 1), wherein upon receiving interrupt indicator at the system controller, the system controller switches the information output select device between the interrupt request device and another information source (paragraph 0023, lines 1-4).

It is desirable to use the switchover device as taught by Denda et al. because it makes it possible to dispense with a troublesome operation for resetting a switchover connection state for the switchover connection device (paragraph 0090, lines 4-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the system of Denda et al. with the system of Godwin and Kawamata et al. to provide a more convenient system.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin (US 6,741,834 B1) in view of Denda et al. (US 2002/0099882 A1) and Kawamata et al. (US 2003/0054758 A1) as applied to claim 1 above, and further in view of Lee (US 5,797,087).

Godwin, Denda et al. and Kawamata et al. discloses all the subject matter as discussed in claim 1 except the first interrupt indicator is a time-slot interrupt signal.

However, Lee teaches a method and apparatus for performing a preset listening operation for a radio broadcast comprising a control signal that when the present time is the same as the preset broadcasting start time, the control signal will switch the output of the radio broadcast from a first tuner to a second tuner for a preset period of time and when the present time is the same as the preset broadcasting end time, the control signal will return the output to the first tuner after the preset period of time has ended, this preset listening operation mode provides an time-slot interrupt signal to switch the output of the radio broadcast from tuner 1 to tuner 2 for a predetermined period of time (column 4, lines 60 – column 5, lines 28)

It is desirable to use a control signal to automatically switch the output of the radio broadcast receiver to a preset channel for a predetermined period of time because it can avoid distracting the attention of the driver when switching the channels for a desired broadcast program which is regularly broadcast (column 7, lines 7-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the teaching of the time-slot interrupt by Lee to replace the teaching of the interrupt signal by Yawamata et al. and combine the teaching of the time-slot

interrupt system of Lee with the system of Godwin, Denda et al. and Kawamata et al. to provide a more convenient system.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wehrmeyer (US 5,404,566) discloses a process for generating an entertainment audio signal interrupted by advertising audio signals and device for carrying out the process. Uhlik (US 6,795,413 B1) discloses radio communications system in which traffic is transmitted on the broadcast channel. Patsiokas (US 2002/0058475 A1) discloses a system for providing signals from an auxiliary audio source to a radio receiving using a wireless link. Stumphauzer, II (US 2003/0014767 A1) discloses a system and method for creating and receiving personalized broadcasts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Siu M. Lee whose telephone number is (571) 270-1083. The examiner can normally be reached on Mon-Fri, 7:30-4:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Siu M. Lee
4/27/2007

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER